



100903

TERRELL C. BIRCH  
 RAYMOND C. STEWART  
 JAMES M. SLATTERY  
 MICHAEL K. MUTTER  
 CHARLES GORENSTEIN  
 GERALD M. MURPHY, JR.  
 LEONARD R. SVENSSON  
 ANDREW D. MEIKLE  
 MARC S. WEINER  
 JOE MCKINNEY MUNCY  
 ROBERT J. KENNEY  
 JOHN W. BAILEY  
 MARK J. NUELLE, PH.D.  
 JAMES T. ELLER, JR.  
 D. RICHARD ANDERSON  
 THOMAS M. SMALL\*  
 ROBERT A. SELDON\*  
 JOHN A. SCILLIERI\*  
 SANFORD ASTOR\*

OF COUNSEL:  
 HERBERT M. BIRCH (1905-1996)  
 BERNARD L. SWEENEY\*  
 ELLIOT A. GOLDBERG\*  
 WILLIAM L. GATES\*  
 EDWARD H. VALANCE  
 RUPERT J. BRADY (RET.)\*  
 F. PRINCE BUTLER  
 FRED S. WHISENHUNT (RET.)  
 JAMES W. HELLWEGE  
 QUENTIN R. "RICK" CORRIE  
 ROBERT F. GNUSE  
 DAVID R. MURPHY  
 ROBERT M. ASHEN\*  
 MICHAEL R. CAMMARATA

\*ADMITTED TO A BAR OTHER THAN VA.

## BIRCH, STEWART, KOLASCH &amp; BIRCH, LLP

INTELLECTUAL PROPERTY LAW  
 8110 GATEHOUSE ROAD  
 SUITE 100 EAST  
 FALLS CHURCH, VA 22042-1248  
 U S A

(703) 205-8000  
 FAX: (703) 205-8050  
 (703) 698-8590 (G IV)

e-mail: mailroom@bskb.com  
 web: http://www.bskb.com

CALIFORNIA OFFICES:  
 CARLSBAD, CALIFORNIA  
 COSTA MESA, CALIFORNIA  
 LOS ANGELES, CALIFORNIA

SENIOR COUNSEL:  
 JOSEPH A. KOLASCH

SCOTT L. LOWE  
 PAUL C. LEWIS  
 RICHARD GALLAGHER  
 MARYANNE ARMSTRONG, PH.D.  
 KECIA J. REYNOLDS  
 KALPANA REDDY  
 ESTHER H. CHONG  
 CATHERINE M. VOISINET\*  
 EUGENE T. PEREZ  
 CAROLYN T. BAUMGARDNER\*  
 MARTIN R. GEISSLER\*  
 J. ALISON GRABELL\*  
 T. BENJAMIN SCHROEDER, PH.D.  
 PERCY L. SQUARE  
 HYUNG N. SOHN  
 CLINT A. GERDINE  
 CRAIG A. MCROBBIE  
 WILLIAM F. NIXON\*  
 DANIEL K. DORSEY  
 MATTHEW T. SHANLEY

REG. PATENT AGENTS:  
 FREDERICK R. HANDREN  
 MAKI HATSUMI  
 GARTH M. DAHLEN, PH.D.  
 ROBERT E. GOOZNER, PH.D.  
 KRISTIL L. RUPERT, PH.D.  
 SUSAN W. GORMAN, PH.D.  
 ROBERT W. DOWNS  
 CHAD J. BILLINGS  
 CHRISTINE V. CASTILLO  
 CARL T. THOMSEN  
 JASON W. RHODES  
 SAM BHATTACHARYA  
 BRADLEY C. FACH

Date: October 9, 2003

Docket No.: 3449-0276P

**MS PATENT APPLICATION**

Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

Sir:

Transmitted herewith for filing is the patent application of

Inventor(s): JUNG, Mun Ho; Joe, Moon Jeung; PARK, Yong  
 Hyun; BYUN, Seong Chan

For: METHOD FOR ESTIMATING LOCATION OF MOVING OBJECT IN  
 NAVIGATION SYSTEM

Enclosed are:

- ☒ A specification consisting of Thirty-two (32) pages
- ☒ Six (6) sheet(s) formal drawings
- ☒ An assignment of the invention
- ☐ Applicant claims small entity status under 37 C.F.R. § 1.27
- ☐ Applicant does not claim priority

01004 U.S. PTO  
 10/681106



- ☒ Applicant claims the right of priority under 35 U.S.C. § 119 based on Application No(s). 2002-62113 filed in Korea on October 11, 2002.
- ☐ Certified copy(ies) is(are) attached hereto.
- ☒ Certified copy(ies) will follow.
- ☒ Executed Declaration (☐ Original ☒ Photocopy)
- ☐ Application Data Sheet in accordance with 37 C.F.R. § 1.76
- ☒ Preliminary Amendment
- ☐ Information Disclosure Statement, PTO-1449 and reference(s)
- ☐ Other:
- ☐ Applicant requests early publication - \$300.00 publication fee
- ☐ Non-publication Request and Certification under 35 U.S.C. § 122(b) (2) (B) (i)

The filing fee has been calculated as shown below:

			LARGE ENTITY	SMALL ENTITY
BASIC FEE			\$770.00	\$385.00
	NUMBER FILED	NUMBER EXTRA	RATE FEE	RATE FEE
TOTAL CLAIMS	14- 20 =	0	X 18 = \$0.00	x 9 = \$0.00
INDEPENDENT CLAIMS	2- 3 =	0	x 86 = \$0.00	x 43 = \$0.00
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS PRESENTED			+ \$290.00	+ \$145.00
TOTAL			\$770.00	\$0.00

- ☒ A check in the amount of \$810.00 to cover the filing fee and recording fee (if applicable) is enclosed.

☐ Please charge Deposit Account No. 02-2448 in the amount of \$0.00. A triplicate copy of this transmittal form is enclosed.

☒ Please send correspondence to:

BIRCH, STEWART, KOLASCH & BIRCH, LLP or Customer No. 02292  
P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By *Scott J. June #41,458*  
James T. Eller, Jr., #39,538

JTE/cgc  
3449-0276P

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachment(s)